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ABSTRACT

A study was conducted to determine whether there were significant differences in the characteristics of students who followed the "cooling out" process and those who did not. The "cooling out" process was defined as a set of counseling strategies designed to assist students with unrealistic aspirations in selecting alternative career goals which would be more in line with their abilities. For this study, "cooling out" encompassed pre-entrance placement testing and/or advising, mandatory or voluntary placement into one or more remedial courses, placement on academic warning and/or probation, and complete withdrawal from the institution or changing initial major to an alternative program which is perceived as being less rigorous and/or associated with less status. The study sample was drawn from one urban and one rural community college in Florida. From master lists of students whose last term of enrollment was fall 1984, 100 dropouts and 100 college graduates were selected. Data from academic transcripts were supplemented by additional information obtained from telephone interviews. Study findings included the following: (1) there was a statistically significant relationship between students' graduation status and the "cooling out" process; (2) the "cooling out" process appeared to be linked to dropping out regardless of race, gender, or father's occupation; (3) the relationship between race and the "cooling out" process was statistically significant; and (4) gender and father's occupations were not statistically related to the "cooling out" process. (EJV)

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CLARK'S "COOLING OUT" CONCEPT AS A FACTOR IN STUDENT COMPLETION OF COMMUNITY COLLEGE PROGRAMS

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ABSTRACT

The purpose of this study was to determine if there was a significant difference in relation to selected student characteristics between students who have followed the cooling out process and those who have not as measured by their graduation status from a two-year community college. The cooling out process was defined as a set of counseling strategies designed to assist students with unrealistic aspirations in selecting alternative career goals which would be more in line with their abilities.

The sample drawn for this study was taken from two community colleges in Florida based on the criterion that one serve a predominatly urban population and one serve a predominately rural population. From each college a master list of students was obtained whose last term of enrollment was the Fall semester 1984. From these lists a total of 100 dropouts and 100 graduates were randomly selected for study.

An ex post facto design was utilized which involved collecting certain information for each student in the sample by reviewing academic transcripts. Additional information was obtained through a subsequent telephone interview. Data which were collected concerning race, gender, father's occupation, status (dropout or graduate), and process (followed the cooling out process or did not follow the cooling out process) were synthesized for each student and recorded for analysis. Non-parametric statistical procedures were performed to determine if significant differences existed between student status and process based on the variables of race, gender, and father's occupation.

Results of the study showed (a) the relationship between student status and process was statistically significant. The cooling out process appears to be linked to dropping out regardless of race, gender, or father's occupation; (b) the relationship between race and process was statistically significant and (c) the relationships between gender and process, and father's occupation and process were not statistically significant.

CLARK'S "COOLING OUT" CONCEPT AS A FACTOR IN STUDENT COMPLETION OF COMMUNITY COLLEGE PROGRAMS

Introduction

Beginning after World War II and continuing through the 1970's, institutions of higher education showed little interest in solving the problem of student attrition. With the post-war baby boom, legislation such as the G. I. Bill, and the growing acceptance of the egalitarian philosophy of admissions, it appeared that college enrollment figures would never decline. Consequently, colleges and universities did not feel the impact of losing students because they were enrolling faster than they were leaving. Resources also appeared to be unlimited as funding formulae were usually tied to enrollment. This situation slowly changed as the college age cohort produced by the post-war baby boom began to decline. With the pool of potential college students drying up, institutions began to experience declining enrollments and diminishing resources. Because of this new situation, institutions of higher education have placed greater emphasis on identifying factors which contribute to student attrition.

Another phenomenon currently affecting the community college is the decline of the transfer function. Kintzer and Wattenbarger (1985) noted that many students who enter community colleges intend to complete requirements for the bachelor's degree; however, relatively few matriculate in senior institutions. They cited several reasons for this decline, including the shift in students' career interests from academic to vocational/occupational fields.

It appears that these phenomena, the increase in attrition and the decline of the transfer function, are linked together through a conceptional framework involving the "cooling out" process. If, indeed, students are being "counseled" or "cooled" from transfer programs to terminal programs and ultimately withdraw from the institution, then the two or three step flow suggested by Clark (1980) which links cooling out to attrition, may be valid.

Background

Declining enrollment is a serious problem currently affecting many institutions of higher education. The open-door community college appears to be prone particularly to high rates of student attrition.

Some of those who have been critical of the community college blame this high rate of attrition on the open-door admissions concept. They believe that because of this egalitarian philosophy, it is difficult at best, if not impossible, to provide equal opportunity, and maintain academic integrity. Clark (1962) observed

> democracy encourages aspiration, and generous admission allows the student to carry his hopes into the school or now principally the college. But there his desires run into the standards necessary for the integrity of programs and the training of competent workers. (p. 80)

As American higher education began to embrace the egalitarian philosophy of admissions, enrollments increased drastically as students began seeking post-secondary education as a means of achieving upward mobility. The American citizenry in general began to view the college credential as a ticket to a better way of life. However, many four-year institutions with aristocratic or meritocratic philosophies of college admissions were not willing to open their doors to accommodate the rising aspirations of the American citizenry. Where then could these potential students go to fulfill their dreams, goals, and aspirations? Jenks and Riesman (1968) believed "the community colleges provide a way out of this dilemma, allowing the universities to become more exclusive without the overall system's doing likewise" (p. 491).

The community college, by virtue of its egalitarian, open-door philosophy, became the vehicle for providing instruction and hopefully upward mobility for many students with wide ranging aptitudes and academic ability. Many who entered the community college lacked the academic prowess or financial support to enroll directly into a four-year institution. In essence the community college allowed the masses to pursue a post-secondary education without altering the basic structure of society or higher education.

However, many believe that community colleges have, in some instances, become revolving doors by not fully addressing student needs (Cross, 1974; Zwerling, 1976). Clark (1960) in his book The Open Door College: A Case Study discussed the dilemma of accepting students with varying academic aptitude. He explained that students with low academic ability should not be allowed to pass through the community college and then be allowed to transfer to a four-year institution. Clark (1960) stated

> if a junior college allows students of low academic promise to slip through, then the frequency of failure by transfer students at senior colleges will increase. The reputation and self-respect of staff members are also affected. (p. 69)

Clark (1960) described the community college as having three types of students; occupational, pure transfer, and latent terminal. According to Clark (1960) the latent terminal student is one who aspires to transfer to a four-year institution but realistically does not have the skills to do so. He believed that students who cannot perform academically at the appropriate level need to be convinced that they are not capable of undertaking an extended college education. Clark (1960) observed

> caught between its open door and the standards of other colleges, therefore, an unselective two-year college needs to "administer" the student who is, in fact, destined to be a terminal student but who does not know it or refuses to recognize this likelihood at the time of entry. The person who earmarks himself as a terminal student is no special problem, nor is the candidate for transfer who comes with high scholastic promise. For the pure terminal and the pure transfer students, destiny is in line with intention. The procedure-shaping type of student is the latent terminal, the "overintender" whose transfer status as a student belies his terminal furture. (p. 69)

Clark (1960) labeled the process of changing ones goals so that they are in line with ones abilities as the "cooling out" process. He believed that the task of convincing latent terminal students that their educational goals are unrealistic involves a sequential series of events. Moore (1975), as cited in Clark (1980), summarized this process.

> The process as described by Clark entails a student's following a structured sequence of guidance efforts . . . which results in "reorientation" rather than dismissal. The process begins with preentrance testing, [mandatory placement testing] which identifies low-achieving students and assigns them to remedial classes [mandatory placement]. The process is completed when the "overaspiring student" is rechanneled out of a transfer program and into a terminal curriculum.

Clark (1960) observed that the primary problem of the junior college is the processing of the student who falls between the transfer and terminal groups. He explained that the filtering out or cooling out process is very much what the junior college is all about.

Other writers such as Zwerling (1976) and Karabel (1972) believed that the cooling out process as described by Clark (1960) serves a hidden function in the overall scheme of higher education and society. Zwerling (1976) maintained that community colleges, through the cooling out process, covertly direct young people into basically the same positions in the social structure that their parents already

occupy. He believed that community college students for the most part come from the lowest socioeconomic classes of college students and that the dropout rate among community college students will be higher than the overall college population.

The cooling out process is therefore viewed by some as the capitalist way of tracking students who are from the lower socioeconomic class in our society into low status jobs (Bowles, 1971: Karabel, 1972; Zwerling, 1976). Karabel (1972) stated that the high rate of attrition at community colleges is actually functional and necessary for the existing social system.

There appears to be two schools of thought regarding the cooling out issue; those such as Clark who believe it is the result of a conflict between academic standards and the open door, and others such as Zwerling and Karabel who view the concept as a class-based tracking process that maintains the social status quo. In reviewing the thesis of both views of the debate, there appears to be agreement that the cooling out process is implicity tied to the high rate of attrition at the two-year community college. Clark (1980) in his article, "The 'Cooling Out' Function Revisited," summarized what was the primary focus of this study.

> then, too, it probably would have helped to have carried the cooling out process one step further: after students move from transfer to terminal programs, or while they are being asked to do so, they often quickly move from college to a job or some other form of withdrawal. This would have hooked cooling out to the enormous attrition of community colleges and suggested a major two-or-three-step flow in the denial of hope, lowering of aspirations, and disengagement. (p. 29)

In summary, the cooling out process appears to be a set of procedures designed to assist gently students who have unrealistic career aspirations in readjusting their educational goals so that they are more in line with academic ability. According to Clark (1960) this process should maximize the student's chances for success within the academic environment and reduce the stress that accompanies the realization that readjustment involves the loss of status associated with the orginal career goal.

For the purpose of this study, the cooling out process was defined as having the following set of procedures:

1. Pre-entrance placement testing and/or advising.

2. Mandatory or voluntary placement into one or more remedial courses.

3. Placement on academic warning and/or probation.

4. Complete withdrawal from the institution (dropping out) or, achieving graduate status by changing initial major to an alternative program of study which is perceived by the student as being less rigorous and/or associated with less status.

Statement of the Problem

The purpose of this study was to determine if there is a significant difference in relation to selected student characteristics (race, gender, father's occupation) between students who have followed the cooling out process and those who have not as measured by their graduation status from a two-year community college.

Research Method and Design

Since the variables involved in this study are "attribute" variables in that they can not be directly manipulated by the researcher, an ex post facto design was utilized.

The sample used for this study was taken from two community colleges in Florida based on the criterion that one serves a predominantly urban population, and one serves a predominantly rural population. The registrar's office of each college was asked to provide a master list comprised of students whose last term of enrollment was the fall semester of 1984. These master lists were then divided into two subgroups: those who graduated at the conclusion of the fall semester of 1984 and those who dropped out during the fall semester of 1984. Using a table of random numbers, 50 students were selected from each subgroup.

Academic transcripts were obtained for each student in the sample. These transcripts were utilized to determine the following information for each student: race, gender, placement test scores, enrollment in remedial courses, academic standing, and degree(s) or certificate(s) awarded (if any).

A telephone survey was utilized to obtain the following additional information necessary for the study but not found on student transcripts: major at entry, major at graduation or exit, reason(s) for changing major (if appropriate), and father's occupation. By reviewing individual transcripts and information obtained through the telephone survey, it was

then possible to synthesize and record for analysis the following information for each student selected for study:

1. race: white, other
2. gender: male, female
3. father's occupation: white collar, blue collar
4. status: graduate, dropout
5. process: followed the cooling out process, did not follow the cooling out process

Because the data collected for this study were classified as belonging to the nominal scale of measurement, the appropriate nonparametric statistical procedures were utilized. Depending on the expected cell frequencies, degrees of freedom, and the number of variables being considered, each hypothesis employed one or more of the following procedures: chi-square test for contingency tables, Fisher's exact test, and the chi-square test for goodness of fit. The .05 level of significance was used as the basis for rejecting the null hypothesis.

Conclusions, Discussion of Results, and Recommendations

The following is a list of major findings based on the results of the study.

1. The cooling out process appears to be linked to dropping out regardless of race, gender, or father's occupation.
2. Proportionally, cooling out occurs significantly more often with minority students than with white students.
3. The frequency of cooling out appears to be evenly distributed between males and females.
4. The frequency of cooling out appears to be relatively evenly distributed between students of white and blue collar families.
5. Nearly one-third of the dropouts selected for study indicated that although they had dropped out they had fulfilled their goal or objective for attending the community college. However, this finding was not consistant across the variable of race. Only 7.1% of the minority dropouts indicated that they had achieved their primary goal or objective. This finding appears to support the general notion that reported rates of student attrition are inflated.

6. Almost one-half of the dropouts selected for study indicated that although they had dropped out they still planned to complete a four-year degree sometime in the future. This finding indicates that many former community college students who were labeled as dropouts may actually be stop-outs.

7. As expected a vast majority of graduates who had obtained the Associate of Arts degree planned to complete a four-year degree (91.0%). However, somewhat atypical was that 43% of the graduates who had obtained the Associate of Science degree, and 55% of the graduates who had obtained a certificate indicated that they planned to complete a four-year degree sometime in the future. It appears that the terminal nature of the Associate of Science and certificate programs offered at the community college does not inhibit many students' aspirations to eventually achieve a four-year degree.

8. Most students were either "very satisfied" or "satisfied" with their experience as a community college student regardless of student status or process.

Discussion of Results

The cooling out function of the community college as described by Clark (1960) appears to be alive but not well. Results from the study indicate that nearly one-third of all community college students may experience the cooling out process. This finding of course would not be inherently bad if the cooling out process were found to be effective in enhancing students' chances for success within the academic environment. Clark (1980), in his article "The 'Cooling Out' Function Revisited" admitted that if he were to do his analysis over, he would consider the <u>effects</u> of cooling out as well as the <u>efforts</u> to cool out.

> In the hindsight of two decades, what would I change in the original analysis if I had to do it over again? The most important change would be to have distinguished more clearly between effort and effectiveness in the cooling out process. It is one thing to observe the procedures constructed by colleges and the work they put into cooling out operations, and another to ascertain their effects on students, essentially answering the question whether the effort was effective or not. (p. 28)

This discussion addresses the cooling out process in terms of effort and effectiveness.

First of all, the effort of cooling out within Florida's 28 community colleges is quite obvious. The first two steps of the process which involve placement testing and mandatory developmental education have been legislatively mandated and written into Florida State Board of Education rules. The third step which involves strict standards of academic progress is firmly planted in most policy manuals of the system's 28 community colleges. Therefore, the "overaspiring" student who enters a community college in Florida has no choice but to begin the cooling out process and hope to exit the institution as a survivor not a casualty. The results of the study found that the efficiency of the cooling out process to increase the overaspiring student's chances for survival within the academic environment to be discouraging at best. The cooling out process was found to be associated with student withdrawal from the community college. The reader should be cautioned at this point that only an association was observed: no attempt was made to show a casual relationship.

This study certainly appears to add credence to Karabel's (1972) and Zwerling's (1976) assertions that the process has just an outward appearance of support for the "overintender," when in fact it is rigged against him. Could the cooling out process be the "grease" that keeps the revolving door spinning so freely? This observed association between cooling out and attrition also appears to confirm what Baird (1971) had suspected about the cooling out process. Although Baird's (1971) study reported a much lower rate of cooling out (11.4% for men, 14.3% for women) he conceded that those figures could be underestimates because those students who had truly cooled out had probably dropped out, and were therefore not included in his sample.

This study did not fully address the global issue of cooling out as a class-based tracking process. However, although no overall statistically significant relationship was reported between father's occupation and cooling out, there was a rather strong association observed between the cooling out process and race. Therefore, further study may indicate that the cooling out process discriminates racially regardless of economic status.

In light of some recent findings it is no great surprise that the cooling out process appears to be associated with student attrition. The success of the first two steps (viewed individually) to enhance student success and/or persistence at the community college has been questioned by two recent studies. McLeod (1985) found that placement test scores in mathematics were poor indicators of how well students will perform in subsequent mathematics courses. In fact McLeod (1985) reported that almost half of the correlations between test scores and grades were negative. McLeod (1985) concluded that alternative methods

of placement be studied especially those which base placement on a variety of factors not just the results of one test. Another study by Greenwood (1984) concluded that there was no statistically significant difference in persistence (in terms of completing freshman-level English) between students who needed but did not enroll in a developmental writing course and students who needed and completed a developmental writing course. Greenwood (1984) also reported that students who needed and enrolled in a developmental writing course earned an associates degree at approximately the same rate as students who needed but did not enroll in a developmental writing course. If the results of these two studies (Greenwood, 1984; McLeod, 1985) indicate that individually the first two steps of the cooling out process are not effective (at least within the disciplines of mathematics and writing) why should the combination of both as part of a process prove otherwise?

It appears that if progress is to be made in helping students adjust their goals so that they are more in line with ability, counseling must be improved and alternative methods of assessment must be explored.

The problems identified in this study are not new, in fact they existed at least 16 years ago. Wattenbarger (1970) in evaluating the various components of the community college cited results of several studies and concluded that

> It seems unlikely based on evidence from these studies that anyone could assume that the guidance and counseling programs which are currently in operation in community colleges could be considered adequate for community college students. (pp. 25-26)

Emphasizing this point further Wattenbarger (1970) concluded that "There is no clear evidence to indicate how well community colleges are succeeding in helping people select appropriate education" (p. 28). Unfortunately, Wattenbarger's (1970) conclusions are as appropriate today as they were 16 years hence.

In conclusion, it seems appropriate to end where it all began with a statement by Clark (1980) which described the primary focus of this study.

> Then, too, it probably would have helped to have carried the cooling out process one step further: after students move from transfer to terminal programs, or while they are being asked to do so, they often quickly move from college to a job or some other form of withdrawal. This would have hooked cooling out to the enormous attrition of community colleges and suggested a major two-or-three-step flow in the denial of hope, lowering of aspirations, and disengagement. (p. 29)

Unfortunately, it does appear that the cooling out process is a factor (of unknown magnitude) which does not seem to enhance student completion of community college programs.

Recommendations

Based on the results of this study the cooling out process is a realistic phenomenon that impacts on student achievement in the community college. Therefore, the following recommendations are made to enlighten professional staff and improve student support services.

1. Because of the nature of the community college all professional staff should become aware of the cooling out process.

2. Alternative methods of assessment and placement should explored including techniques for determining self concept.

3. Attempts should be made to increase the status of developmental programs so that there is less negative stigma associated with those courses of study.

4. The practice of utilizing program advisors who have no formal training in guidance, counseling, or test interpretation for academic and career counseling positions within the community college should be examined.

5. Policies concerning standards of academic progress should be reviewed to determine their impact on student persistence.

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